

#### MATERIAL SAFETY DATA SHEET

#### VIVANTIS TECHNOLOGIES SDN BHD REVONGEN CORPORATION CENTER

Document No.: MSDSrev05 PC0719

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#### **SECTION 1: CHEMICAL IDENTIFICATION**

Catalogue Number: PC0719-50kU; PC0719-100kU Product Name: Deoxyribonuclease I (DNase I)

Intended Use:

For research use only. Not for use in diagnostic procedures.

#### **Company Headquarters:**

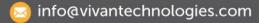
Vivantis Technologies Sdn Bhd Revongen Corporation Center Level 17, Top Glove Tower, No. 16, Persiaran Setia Dagang, Setia Alam, Seksyen U13, 40170 Shah Alam, Selangor Darul Ehsan, Malaysia.

Tel: +6 03 3359 1166 Fax: +6 03 3358 0303

Email: info@vivantechnologies.com Website: www.vivantechnologies.com

#### **Company Manufacturing:**

Vivantis Technologies Sdn Bhd Level 1, Enterprise 2, Technology Park Malaysia, Lebuhraya Puchong-Sg. Besi, 57000 Bukit Jalil, Kuala Lumpur, Malaysia.









#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%
DNase I	9003-98-9	95-100

Synonyms: Alkaline deoxyribonuclease; alkaline DNase; deoxyribonuclease; deoxyribonuclease

A; deoxyribonuclease; deoxyribonuclease (pancreatic); Deoxyribonucleic phosphatase; deoxyribonuclease; DNAse; DNA depolymerase; DNA endonuclease; DNA nuclease; DNase; DNase I; dornase; dornava; dornavac; E.C. 3.1.4.5; endodeoxyribonuclease I; Escherichia coli endonuclease I; pancreatic

deoxyribonuclease; pancreatic dornase

### SECTION 3: HAZARDS IDENTIFICATION

**GHS Classification** 

Respiratory sensitizer - Category 2 Skin sensitizer - Category 2

#### **GHS** Label elements, including precautionary statements:



Signal word: Warning

#### **Hazard statements**

H317 May cause an allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### **Precautionary statements**

P280 Wear protective gloves/ clothing/ eye and face protection.

P302 + P352 If on skin, wash with plenty of soap and water.

P304 + P340 If inhaled, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.









#### **SECTION 4: FIRST-AID MEASURES**

In case of eye contact, rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

In case of skin contact, wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

In case of inhalation, move to fresh air. If breathing becomes difficult, give oxygen.

In case of ingestion, rinse mouth with water and drink plenty of water afterwards.

#### **SECTION 5: FIRE FIGHTING MEASURES**

Not flammable.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Use carbon dioxide, dry chemical, water spray or regular foam.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH and full protective gear.

Hazardous decomposition products formed under fire conditions: Carbon dioxide, nitrogen oxides

Flash point:

Explosion data – sensitivity to mechanical impact:

Explosion data – sensitivity to static discharge:

Not determined

Not sensitive.

Not sensitive.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

For personal protection, use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

For environmental precautions, prevent further leakage or spillage if safe to do so.

For cleaning up, carefully wipe up or moistened with water. Pick up and transfer to properly labeled containers. After material pickup is completed, ventilate area and wash spill area.

#### **SECTION 7: HANDLING AND STORAGE**

Handle in accordance with good industrial hygiene and safety practice.

Keep containers tightly closed in a dry and well-ventilated place. Protect from sunlight.









#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection Irritation is experienced if exceeded exposure limits. NIOSH/MSHA

approved respiratory protection should be worn at all time. In case of exposure to high airborne contaminant concentrations, positive pressure-supplied air respirators may be required. Respiratory protection must be provided in accordance with current local

regulations.

Skin and body protection Wear protective gloves/clothing. Eye/Face protection Tightly fitting safety goggles.

Use engineering measures such as showers, eyewash stations and ventilation system.

Handle in accordance with good industrial hygiene and safety practice.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: White to off-white

Physical state: Powder

Odor: No information available
Odor threshold: No information available
Density: No information available

pH: pH6-8

Melting point:

Freezing point:

No information available

Flash point: Not applicable Autoignition temperature: No data available

Decomposition temperature: No information available

Upper Flammability limit in air:

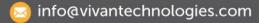
No data available
Lower Flammability limit in air:

No data available

Explosive properties: No information available Oxidizing properties: No information available

Solubility: Water soluble
Partition coefficient (n-octanol/water): No data available
Vapor pressure: No data available
Vapor density: No data available
Evaporation rate: No data available

Specific gravity: No information available Viscosity: No information available









#### **SECTION 10: STABILITY AND REACTIVITY**

Stable under recommended storage conditions.

Materials to avoid: None known based on information supplied.

Hazardous decomposition products: No information available.

Hazardous polymerization: Hazardous polymerization does not occur. Conditions to avoid: None known based on information supplied.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Acute toxicity:**

Sensitizer.

#### **Chronic Toxicity:**

No known effect based on the information supplied.

Target organ effects: None known.

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

#### **SECTION 12: ECOLOGICAL INFORMATION**

#### **Ecotoxicity:**

The environmental impact of this product has not been fully investigated.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

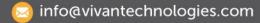
Dispose waste material in accordance with all federal, state and local environmental regulations. For contaminated packing, dispose as waste material.

### SECTION 14: TRANSPORT INFORMATION DOT

Not regulated

#### **IATA**

Not regulated









#### **SECTION 15: REGULATORY INFORMATION**

#### **International Inventories**

TSCA Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
IECSC Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply

#### **U.S. Federal Regulations**

**SARA** 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulation, Part 372:

#### SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### **U.S. State Regulations**

California Proposition 65 This product does not contain any Proposition 65 chemicals.

#### **International Regulations**

**Mexico – Grade** No information available.









#### **WHMIS Hazard Class**

D2A Very toxic materials D2B Toxic materials



#### **SECTION 16: OTHER INFORMATION**

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- info@vivantechnologies.com
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